GYKS2 Probe

Analogue

GPM Noise Cancel CE

Comapct•analogue output type (All-in-one)

GYKS2 is the all-in-one series of GYKM. The length of the body became short compared with conventional GYKS in the rod type. GYKS2 is replacement model of GYKM-LS/LT. You can get a voltage or current analog signal proportional to magnet position only by applying a 24VDC power supply directly to GYKS2. It has alarm output and is equipped with noise cancellation functions.
It gives infinite life time due to magnetostrictive non-contact sensor, well replacing conventional potentiometers. And with the captive software (GPM), zero and gain adjustment is possible at user side.

Specifications

Accuracy	Non-linearity	≦±0.025%FS TYP
	Resolution	≦0.01%FS
	Repeatability	≦±0.01%FS
	Temp. drift	≦±50ppmFS/℃
Output	Voltage output	0～10V or 10～0V (output current : Max.5mA, load : Min.2kΩ)
	Current output	4～20mA or 20～4mA (load : Max.500Ω)
Power supply		+24(±2)VDC (less than 100mA)
Sampling freq.		Std 1kHz (up to stroke 1000mm)
Environment	Operating temp.	0℃～+65℃
	Storage temp.	-20℃～+65℃
	Vibration	3G (or 40Hz 1mmPP)
	Shock	10G (2msec)
	IP grade	IP53, IP64, IP65

・The above mentioned accuracy applies to sensors with an effective stroke of 300mm or more.
・The specification of stroke less than 300mm is equal that of stroke 300mm.

・Mounting brackets are supplied.
stroke ＜600mm : 4 pcs
600～1000mm : 6 pcs
1001～1200mm : 8 pcs
1501～2500mm : 10 pcs

・When replacing GYKM-LS/LT, a spacer for height adjustment is prepared. When you need it, please order separately.

Model

■Probe

GYKS2-□□□□-S/S-□-CN-□-□

① ⑤ ② ③ ④ ⑥

①Effective stroke

15mm～2000mm (rod type)
15mm～500mm (both end universal joint types)
15mm～2500mm (U, TS, TW type)

②Magnet

R : rod Φ6 (M5 thread) <IP53> (Standard)
R2 : rod Φ6 (M5 thread) <IP64>
R88 : rod Φ8 (M8 thread) <IP64>
R85 : rod Φ8 (M5 thread) <IP64>
RW88 : Both end Universal Joint Type (rod Φ8) <IP64>
U : Slide magnet <IP65>
T : Floating magnet (gap 1mm) <IP65>
TS : Floating magnet (gap 4mm) <IP65>
TW : Floating magnet (gap 8mm) <IP65>
U-FX65 : Slide magnet + rod Φ6 (M5 thread) with linkball joint <IP65>
U-FX88 : Slide magnet + rod Φ8 (M8 thread) with linkball joint <IP65>

③Cable connection

CN : connector

・When ordering the connector with cable, please refer to Page 112.
・Connector : Omron XS2C-D4S1 (straight type) or D4S2 (L type) (Material : PBT plastic)
・In case that you need loose mating connector, ordering connector (straight or L-shaped) separately is necessary.

④Position output

AD : 0～10V (When magnet moves toward tip, output increase)
AR : 10～0V (When magnet moves toward tip, output decrease)
BD : 4～20mA (When magnet moves toward tip, output increase)
BR : 20～4mA (When magnet moves toward tip, output decrease)

・Bipolar output (±10V) is not available.

⑤Dead zone

In case of an effective stroke 1001mm or more for slide or floating magnet type (except rod type), dead zone length for head side is 150mm. In case of an effective stroke 2001mm or more, dead zone length for tip side is 70mm or 80mm (standard length + 15mm). Model code of dead zone will be the actual length (mm).

stroke	～1000	1001～2000	2001～
rod	S/S	S/S	—
T,U	S/S	150/S	150/70
TS,TW	S/S	150/S	150/80

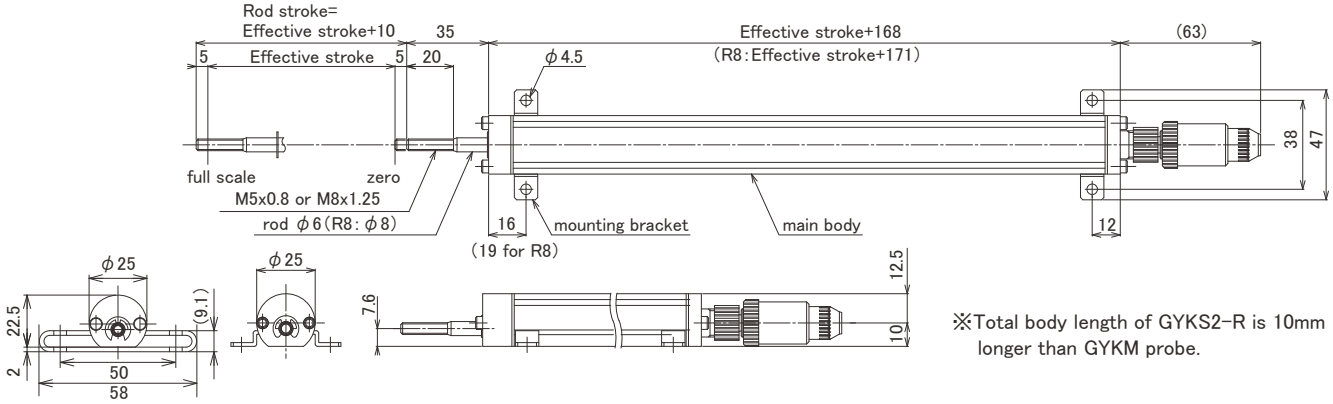
⑥Clamp

K38 : with mounting brackets
F50 : with fixing clamps
N : without mounting brackets and fixing clamps

Dimensions

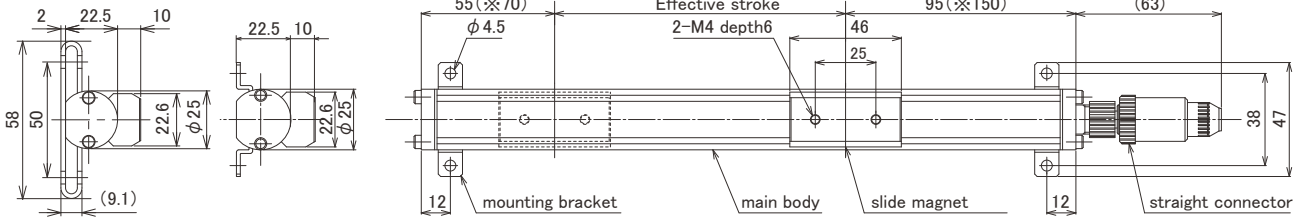
■Rod ϕ6 type (Code : R) (IP63) [Rod ϕ8 type (Code : R8) (IP64)]
(rod material : SS304)

Main body material of GYKS2 series is Aluminum

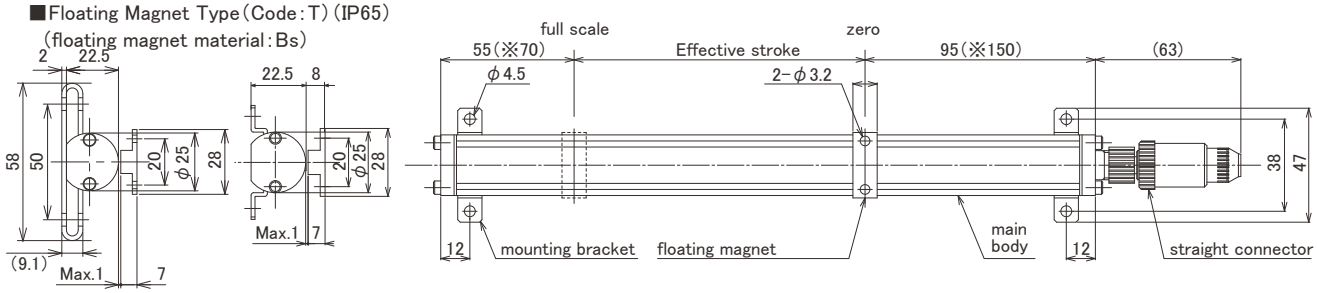


※Total body length of GYKS2-R is 10mm longer than GYKM probe.

■Slide Magnet Type (Code : U) (IP65)
(slide magnet material : POM resin)

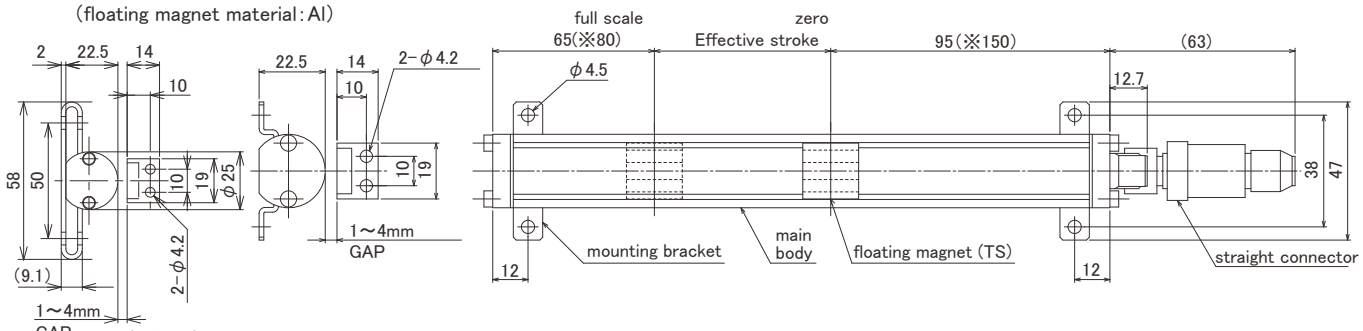


■Floating Magnet Type (Code : T) (IP65)
(floating magnet material : Bs)



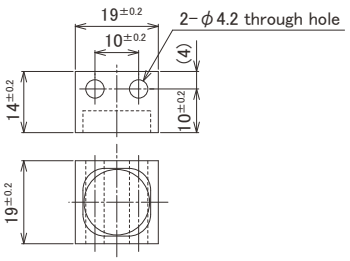
・(※150) : In case of stroke 1001mm or more, dead zone length for head side is 150mm.
・(※70) : In case of stroke 2001mm or more, dead zone length for tip side is 70mm.(U or T type)

■Floating Magnet Type (Code : TS) (IP65)
(floating magnet material : Al)

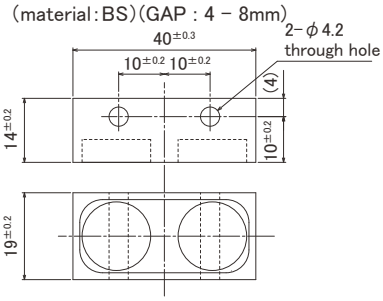


・(※150) : In case of stroke 1001mm or more, dead zone length for head side is 150mm.
・(※80) : In case of stroke 2001mm or more, dead zone length for tip side is 80mm.(TS or TW type)

■Floating magnet (TS)
(material : Al) (GAP : 1 – 4mm)



■Floating magnet (TW)
(material : BS) (GAP : 4 – 8mm)



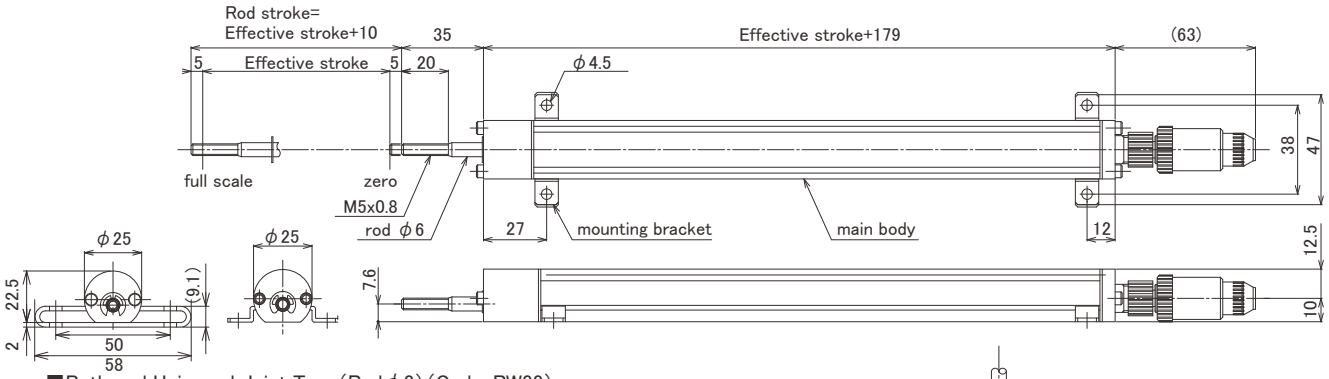
■Cable

Cable color	Pin number	Function
red	1	+24VDC
white	2	0V
black	3	OUT
green	4	COM

・shield should be connected with 0V at user side. 0V and COM are connected inside.

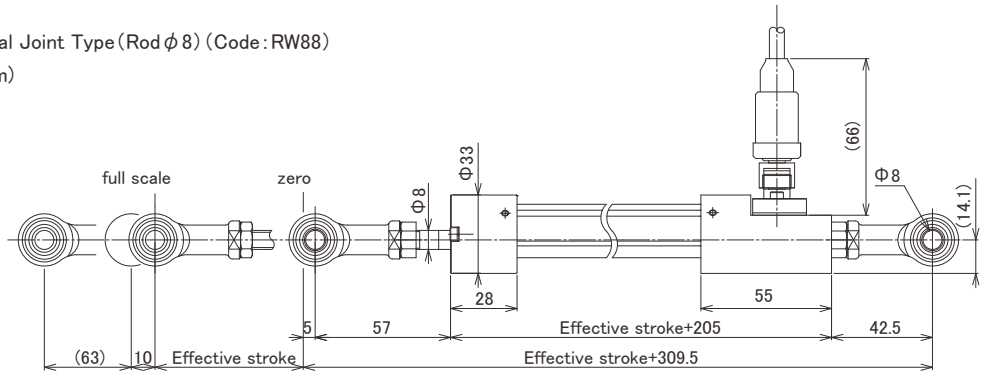
■Water-Resistant Rod(ϕ6) Type(IP64 dust and splash proof)(Code:R2)

Rod cap extended to 21mm, double packing used, IP64 grade protection is now available.



■Both end Universal Joint Type(Rod Φ8)(Code:RW88)

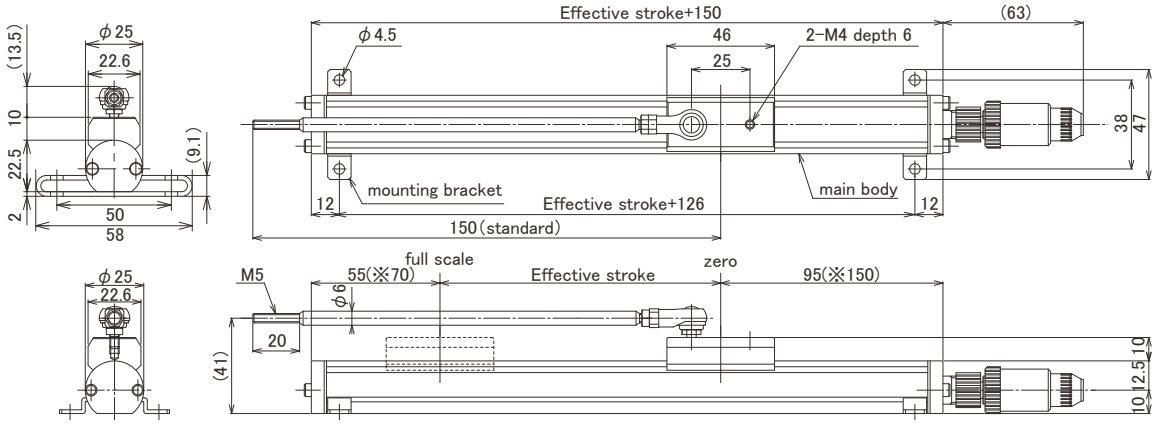
(storke : ≦500mm)



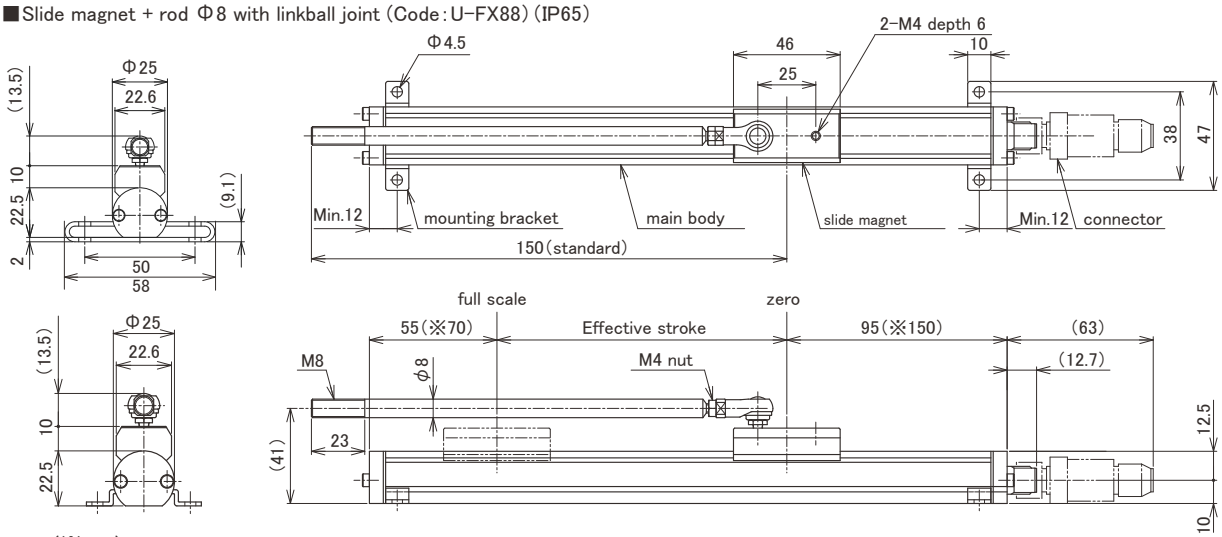
■Slide magnet + rod Φ6 with linkball joint (Code:U-FX65)(IP65)

For water splash application, U-FX65 option is available.

Mounting ϕ6 rod on the slide magnet with linkball joint, easy adjustment of rod misalignment is also possible.



■Slide magnet + rod Φ8 with linkball joint (Code:U-FX88)(IP65)



・(※150):In case of stroke 1001mm or more, dead zone length for head side is 150mm.

・(※70):In case of stroke 2001mm or more, dead zone length for tip side is 70mm. (U or T type)